UNIVERSITY OF BOLTON

OFF CAMPUS DIVISION

WESTERN INTERNATIONAL COLLEGE

BA (HONS) ACCOUNTANCY

SEMESTER ONE EXAMINATION 2024/2025

MANAGEMENT ACCOUNTING AND DECISION-MAKING

MODULE NO: ACC5002

Date: Monday, 13 January 2025 **Time: 4:00 pm – 7:00 pm**

INSTRUCTIONS TO CANDIDATES:

There are FOUR (4) questions on this paper and all are COMPULSORY.

TWO (2) questions in Section A.
TWO (2) questions in Section B.

This is a 3-hour closed book examination.

Answer ALL FOUR (4) questions.

All questions carry equal marks.

Use of calculators is allowed.

Discount tables and Formula sheet are attached at the back of this question paper.

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SECTION A – ANSWER ALL QUESTIONS FROM THIS SECTION

QUESTION 1

Alcatel Ltd, mid-sized electronics manufacturing company, has been experiencing steady growth over the past few years. To capitalise on emerging market opportunities and to strengthen its competitive position, the company has recently embarked on an ambitious expansion strategy.

As part of this strategy, the management team at Alcatel Ltd is currently evaluating three potential investment projects, each with unique characteristics and potential benefits.

Each project requires an initial capital investment of £700,000.

All the projects have a lifespan of 5 years. The net after-tax cash flows of the projects are as follows: -

Years	Project A (£)	Project B (£)	Project C (£)
1	225,000	275,000	165,000
2	225,000	200,000	205,000
3	225,000	150,000	140,000
4	150,000	150,000	215,000
5	150,000	150,000	190,000

The company has a target cost of capital of 10% which it uses to evaluate all new projects. In addition, at the end of the five-year project, the assets initially bought for project B will be sold for £100,000.

Question 1 continued over the page…

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Question 1 continued…

Required:

I. Compute the Net Present Value (NPV) for each project and recommend which project should be taken up.

(10 marks)

II. Calculate the payback period for Project A only.

(3 marks)

III. Calculate the Accounting Rate of Return (ARR) for Project B using the average method.

(3 marks)

IV. Calculate the Internal rate of return (IRR) for Project C only.

(4 marks)

V. Critically evaluate the use of future cash flows over accounting profits in capital investment appraisal.

(5 marks)

[TOTAL 25 MARKS]

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Question 2

a) You are the senior executive of a large manufacturing company, and you're conducting an evaluation of your production managers. The company has several production managers, each responsible for a different product line. You strongly believe in the principle of controllability and want to ensure fair and accurate evaluations.

Required:
In the context of the production managers, how would you apply the principle of controllability to determine which costs should be considered when evaluating their performance, and which costs should be excluded from their evaluation? Provide specific examples to illustrate your approach.

(5 marks)

b) Analyse the attributes of a good transfer policy and the methods of transfer pricing

(5 marks)

c) The Salary for the market researcher in charge of guiding the development of a new product. This is a new position designed specifically for the new product, and it will have a fixed cost of £50,000.

Evaluate whether this cost is relevant to the decision to proceed with the development of the product. Provide relevant reason to your answer.

(3 marks)

d) Office cleaning expenses of £200 for next month. The office is cleaned by contractors and the contract can be cancelled by giving one month's notice.

Is this cost relevant to a decision to close the office? Provide relevant reason for your answer.

(2 marks)

e) Evaluate the benefits of the Balanced Scorecard in a Performance Management System.

(5 marks)

f) Compare and contrast between marginal and absorption costing.

(5 marks)
[TOTAL 25 MARKS]

Please turn the page

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SECTION B – ANSWER ALL QUESTIONS FROM THIS SECTION

QUESTION 3

a) Radek Ltd has budgeted sales of 400 units at £2.50 each. The variable costs are expected to be £1.80 per unit, and fixed costs are to be absorbed at £0.20 per unit.

The actual sales were 500 units at £2 each and variable costs were £1.50 and fixed costs were as expected.

Required:

Calculate the sales price and sales volume variances (using marginal and absorption costing).

(6 marks)

b) The following information relates to the production of Product X**.**

Extract from the standard cost card of Product X.
Direct materials (40 square metres × £5.30 per square metre) £212.

Actual results for direct materials in the period: 1,000 units were produced and 39,000 square metres of material costing £210,600 in total was purchased and used.

Required:

Calculate the materials total, price and usage variances for Product X in the period.

(6 marks)

Question 3 continued over the page…

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c) Roseberry Ltd makes a single product. Information relating to this product is given below:

Fixed production overheads: £22,960
Units: 6,560
The standard time to produce each unit is 2 hours

Actual
Fixed production overheads: £24,200
Units: 6,460
Labour hours:12,600 hrs

Required:

Calculate the following:

I. fixed overhead absorption rate per hour

(2 marks)

II. fixed overhead capacity variance

(3 marks)

III. Fixed overhead efficiency variance

(3 marks)

IV. Suggest the possible causes for the EACH variance calculated in (c).

(5 marks)

[TOTAL 25 MARKS]

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QUESTION 4

a) As a part of the next management meeting, you have been asked to evaluate the following approaches to budgeting

I. Imposed budget and participatory budget

II. Incremental Budget

III. Zero-based budgeting

IV. Activity-based budgeting

V. Rolling Budget

(20 marks)

b) In his study of The Impact of Budgets on People Argyris reported the following comment by a financial controller on the practice of participation in the setting of budgets in his company. 'We bring in the supervisors of budget areas, we tell them that we want their frank opinion but most of them just sit there and nod their heads. We know they're not coming out with exactly how they feel. I guess budgets scare them.'

Required:

Evaluate reasons why managers may be reluctant to participate fully in setting budgets

(5 marks)

[TOTAL 25 MARKS]

END OF QUESTIONS

PLEASE TURN THE PAGE FOR FORMULAE SHEET

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FORMULAE SHEET

Internal Rate or Return (IRR)

$$IRR = r_a + \frac{NPV_a}{NPV_a - NPV_b}(r_b - r_a)$$

r_a = lower discount rate chosen
r_b = higher discount rate chosen
N_a = NPV at r_a
N_b = NPV at r_b

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Present Value Table

Present value of 1 i.e. $(1 + r)^{-n}$

Where r = discount rate

n = number of periods until payment

Periods	*Discount rates (r)*										
(n)	**1%**	**2%**	**3%**	**4%**	**5%**	**6%**	**7%**	**8%**	**9%**	**10%**	
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	**1**
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	**2**
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	**3**
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	**4**
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	**5**
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	**6**
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	**7**
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	**8**
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	**9**
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386	**10**
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	**11**
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	**12**
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	**13**
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263	**14**
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	**15**

(n)	**11%**	**12%**	**13%**	**14%**	**15%**	**16%**	**17%**	**18%**	**19%**	**20%**	
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833	**1**
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694	**2**
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579	**3**
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482	**4**
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402	**5**
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335	**6**
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279	**7**
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233	**8**
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194	**9**
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162	**10**
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135	**11**
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112	**12**
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093	**13**
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078	**14**
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065	**15**

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